

**ABSTRACT OF THE DISCLOSURE**

The present invention provides an optical module with effective thermal dissipation characteristic. The present optical module comprises a semiconductor optical device, a stem, plural lead terminals, a substrate and a  
5 base. The stem mounts the semiconductor optical device. The lead terminals extend along a predetermined axis from the stem. The base mounts the substrate on which an electronic circuit is provided. The edge portion of the base adjacent to the stem is made of a material containing the same ingredient as that contained in the stem, or the stem and the base are formed in unity.